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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,283	07/08/2003	Mark E. Ragsdale	5649	8216
7590 09/19/2005				
Milliken & Company P. O. Box 1927 Spartanburg, SC 29304		EXAMINER COONEY, JOHN M		
		ART UNIT PAPER NUMBER		
		1711		
DATE MAILED: 09/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/615,283

Applicant(s)

RAGSDALE ET AL.

Examiner

John m. Cooney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2 and 17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

Applicant's arguments filed 6-30-05 have been fully considered but they are not persuasive.

Claim objection withdrawn in light of applicants' correction. Rejection under 35 USC 112 1<sup>st</sup> paragraph relating to BHT derived compounds is moot and, accordingly, withdrawn in light of applicants' amendments. Rejection under 35 USC 102 over Li et al. is withdrawn in light of further consideration.

The following are either maintained or set forth as new herein:

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, and 17 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a small class of lactone-based antioxidant compounds, does not reasonably provide enablement for the full scope of compounds which are derived from lactone. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims. There is a broad range of compounds based on lactone which have not been contemplated by applicants' disclosure. Applicants' supporting disclosure does not provide enablement for practice

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of the full scope of the instant claims as they are now recited without undue experimentation being required. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404.

This rejection is maintained as set forth above. Applicants' amendments and comments do not serve to address the rejection, and it is maintained that the above rejection is proper for the reasons set forth above.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,2,and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The use of "based" within the term "lactone-based antioxidant" is confusing as to intent because it can not be determined to what extent the antioxidant is based on or derived from lactone.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelbin(6,569,927) in view of McCullough, Jr.(6,022,946).

Gelbin discloses a stabilizing additive blend for stabilizing polymers comprising sterically hindered phenol antioxidants, secondary aromatic amine antioxidants, and lactone antioxidants (see column 3 line 44 – column 4 line 54, as well as, the entire document).

Gelbin differs from applicants' claims in the benzotriazole compounds are not required in the stabilizing blends. However, McCullough, Jr. discloses employment of benzotriazole compounds employed in antioxidant stabilized polymer compositions (see column 11 lines 62-63, as well as, the entire document) for the purpose of providing UV stabilization to the compositions formed. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the benzotriazole UV stabilizer compound of McCullough, Jr. in the stabilizing additive blends of Gelbin for the purpose of imparting UV stabilizing effects to the polymers treated in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Applicants lack a showing of new or unexpected results attributable to the employment of benzotriazole in their additive blends which are commensurate in scope with the scope of their claims.

Additionally, it should be noted that the recitation "wherein said additive is effective for reducing ..." does not carry the same weight as the limitation "in an amount

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effective ..." discussed in the interview for which it was indicated support would necessarily need to be shown. The current recitations of the claims do not limit the claims to amounts of individual components beyond the mere requirement that they be present.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Li et al.(previously cited) is maintained for its disclosure of relevant benzotriazole stabilizers and other stabilizing materials. Reich (5,342,862) is cited for its verification that Tinuvin 327(column 5 lines 24-25) is a benzotriazole stabilizer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY, JR.  
PRIMARY EXAMINER  
Group 1700